

REMARKS

This is a response to the Office Action dated January 31, 2003. Claims 1-67 are pending in the application. In the Office Action, minor informalities were noted in the Specification and Claims. In addition, claims 1-4, 6, 8-12, 14-16, 18-22, 24-36, 38, 39, 41, 42, 44-58, 63, 64 and 66 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Pat. No. 6,301,527 ("Butland"). Further, claims 5, 23, 40, 59, 65 and 67 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Butland in view of U.S. Pat. Publication No. 2002/0120723 ("Forth").

The rejections from the Office Action of January 31, 2003 are discussed below in connection with the various claims. No new matter has been added. Reconsideration of the application is respectfully requested in light of the following remarks.

I. AMENDMENTS TO THE SPECIFICATION

With this response, the Specification has been amended. These amendments add no new matter and are supported by the Specification. In particular, the exemplary XML program code has been amended to correct typographic errors in the XML tags. One of ordinary skill in the art would appreciate that XML code requires underscores in place of spaces in XML tag codes.

II. REJECTIONS UNDER 35 U.S.C. § 102(e)

Independent claims 1, 30, 56, 63 and 66 were rejected pursuant to 35 U.S.C. § 102(e) as being anticipated by Butland. With this response, claims 1-4, 6-13, 15, 19, 20, 23, 28-31, 35-39, 41, 43-49, 54, 56-59, 61-65 and 67 have been amended for clarity and not for reasons related to patentability. These amendments are supported by the specification and no new matter has been added. Applicants submit that Butland does not anticipate independent claims 1, 30, 56, 63 and 66, as amended, as this reference fails to disclose all of the elements of these claims.

Independent Claim 1, relates to an electrical power management architecture comprising a network and at least electric meter coupled with the network and *an instant message server* coupled with the electric meter and network with the electric meter operative

to generate a first *instant message* to the instant message server and receive a second instant message from the instant message server.

Independent Claim 30, as amended, relates to an electric power management architecture. The architecture includes a network, a *presence server* and at least one electric meter coupled with the network. The electric meter is further operative to *autonomously indicate* the connection of the electric meter on the network with the presence server able to receive the *autonomous indication*.

Independent Claim 56, as amended, relates to a method of monitoring the presence of at least one intelligent electronic device (“IED”) in an electrical power management architecture. The method includes “coupling the IED with a network, the IED being characterized by presence”, “*transmitting, autonomously, the presence* of the IED on the network”, “receiving the presence of the IED at a *presence server* coupled with the network”, and “monitoring the presence of the IED”.

Independent Claim 63 relates to an electrical power management architecture. The architecture includes a network, a *presence server* coupled with the network and at least one IED coupled with the network. The IED is operative to *autonomously indicate* the connection of the IED on the network with the presence server operative to receive the presence indication of the IED.

Independent Claim 66 relates to an electrical power management architecture. The architecture includes a network, at least one IED coupled with a portion of the electrical power distribution system and further coupled with the network. The IED is further operative to implement a power management function in conjunction with the electrical power distribution system with the power management function operative respond to at least one power management command and generate power management data. The IED further comprises a first network interface to couple the IED with the network and facilitate autonomous transmission of the power management data and receipt of at least one power management command over the network, a *security module* coupled with the network interface and operative to prevent unauthorized access to the power management data. The architecture further comprises a power management application coupled with the network and operative to receive and process the power management data from the IED and generate

at least one power management command to the IED to implement the power management function.

Butland discloses a power management system including a computer with an interface defining a first network having a network layer protocol. A gateway is connected to the first network for converting the network layer protocol to a first application layer protocol and defining a second network. A first intelligent electronic device is connected to the second network and a second intelligent electronic device is connected to the first network. A first server associated with the computer communicates with the first intelligent electronic device using a first application layer protocol. A second server associated with the computer communicates with the second intelligent electronic device using a second application layer protocol. The first and second servers processing data received from the first and second intelligent electronic devices to manage power use. *See* Butland, Col. 2, lines 9-25 and Figure 1.

A. Independent claims 1 and 30

Butland fails to disclose that the electric power management architecture contains an instant message server or a presence server as claimed in claims 1 and 30. Butland relates generally to power management control system and in particular, to a power management control that implements the Utility Communications Architecture (“UCA”). *See* Butland, Col 1, lines 11-14. Additionally Butland discusses Modbus RTU/DDE Servers in combination with the disclosed power management system. *See* Butland, Col 1, lines 19-21. Butland does not disclose a presence or an instant messaging server as defined in Applicants’ Specification. Further, Butland fails to disclose devices which perform the functions of a presence or an instant messaging server. While Butland discloses various gateway, concentrator and server devices (*See* Butland, Figure 1 and Col. 2, lines 9-25; Col. 3, lines 31-42; and Col. 3, line 62 – Col. 4, line 7), Butland discloses only the implementation of a master/slave network wherein the various gateway and concentrator devices facilitate the communications between the master, i.e. the server, and slave, i.e. IED, devices over heterogeneous networks. In contrast, presence and instant messaging servers facilitate communications between peer devices in peer-to-peer networks, whether homogeneous or heterogeneous.

As Butland fails to disclose an instant message server or a presence server, Applicants submit that claims 1 and 30 are not anticipated by Butland.

B. Independent claim 56 and 63

Butland fails to disclose a presence server wherein the IED autonomously transmits
5 presence or connection information which is monitored or received by the presence server, as claimed in claim 56 and 63.

As previously explained, Butland discloses a power management control system utilizing the UCA, Modbus RTU and DDE protocols. Butland does not disclose that the IED's transmit, autonomously, presence information or indication of the IED's connection
10 with the network onto the network or the existence of a presence server coupled with the network.

Butland discloses only the polling of IED's and the determination of whether or not an IED has responded to a poll in order to discern an IED's status. *See* Butland, Col. 13, line 56 – Col. 15, line 25. Polling a device for status and basing the status of the device on the
15 response, or lack thereof, does not definitively provide the status of the device. The lack of response could be due to the device not functioning properly or could be due to a problem with any portion of the connection between the IED and the polling device. However, as described in Applicants' specification, the autonomous transmission of presence eliminates the indeterminate state of transmission as well as the need to poll devices, thereby resulting
20 in more efficient use of resources.

As these elements are not disclosed by the cited reference, the Applicants submit that claims 56 and 63 is not anticipated by Butland.

C. Independent claim 66

Butland fails to disclose a security module coupled with the IED and the network and
25 operative to prevent unauthorized access to the power management data.

Butland does disclose that “[s]ince, gateway 18 seeks to retransmit packets received from the LAN, it is very important to ensure that these packets did in fact come from the power management system and not other non-related devices such as view node computers 40 and 44 (i.e., authentication and security).” *See* Butland, Col. 5, lines 22-27. However,

Butland fails to disclose how this is accomplished and in particular, Butland fails to disclose any kind of security device coupled with the IED which prevents unauthorized access to the power management data. Butland, at most, discloses the need to authenticate packets, but does not disclose the need or means to prevent unauthorized access to the packets.

5 Therefore, as a security module, as claimed, is not disclosed by the cited reference, the Applicants submit that claim 66 is not anticipated by Butland.

For at least these reasons, independent claims 1, 30, 56, 63 and 66 are not anticipated by Butland. Accordingly, Applicants request that the Examiner withdraw this rejection of
10 independent claims 1, 30, 56, 63 and 66.

D. Dependent claims

Dependent claims 2-4, 6, 8-12, 14-16, 18-22, 24-29, 31-36, 38, 39, 41, 42, 44-55, 57, 58 and 64 were also rejected pursuant to 35 U.S.C. § 102(e) as being anticipated by Butland. Dependent claims 2-4, 6, 8-12, 14-16, 18-22, 24-29, 31-36, 38, 39, 41, 42, 44-55, 57, 58 and
15 64 should be allowed for the reasons set out above for the independent claims. Applicants therefore request that the Examiner withdraw this rejection of these claims.

In addition, additional limitations of these dependent claims also distinguish over the cited reference. For example, the cited reference does not disclose: a presence server coupled with a network and operative to autonomously indicate a connection of said electric
20 meter with said network with the connections characterized by a presence, as claimed in claim 2 and 31; wherein the presences server indicates the presence of the electric in substantially real time, as claimed in claim 3 and 38; wherein the presences server polls the presence of the electric meter using an electronic mail message, as is claimed in claim 12 and 36; wherein the presences server receives the presence of the electric meter from the electric
25 meter, as is claimed in claim 4; wherein the instance message server is operative to facilitate communication of data using a third instance message, as claimed in claim 14; wherein the third instant message is sent to a plurality of electric meters each further coupled with the network, as claimed in claim 15 and 33; wherein the third instant message comprises power management data, as claimed in claim 16; wherein the power management data further
30 comprises upgrade data, as claimed in claim 18; wherein the instant message server is

located on the electric meter or revenue meter, as claimed in claim 20 and 54; wherein the instant message server is centralized, as claimed in claim 21 and 42; wherein the instant message server is distributed, as claimed in claim 22; wherein the network comprises a publicly accessible communications network, as claimed in claim 24 and 50; wherein the network comprises the Internet, as claimed in claim 26; wherein said electric meter is a revenue meter, as claimed in claim 28; wherein the electric meter is characterized by a presence, the electric meter operative to broadcast said presence, as claimed in claim 29 and 53; wherein an instant message server coupled with the network, as claimed in claim 32; wherein said autonomous indication is further characterized by a status, as claimed in claim 34 and 48; wherein said presence server receives said autonomous indication of said electric meter from said electric meter, as claimed in claim 39; wherein said presence server is located on said electric meter, as claimed in claim 41; wherein an instant message server is coupled to at least one intelligent electronic device and said network, as claimed in claim 55; and wherein said power management data and said power management commands are communicated as instant messages, as claimed in claim 67.

III. REJECTIONS UNDER 35 U.S.C. § 103(a)

Claims 2, 3, 8, 5, 23, 40, 59, 65 and 67 were rejected pursuant to 35 U.S.C. § 103(a) as being unpatentable over Butland in view Forth. The Applicants submit that Forth does not preclude patentability in view of 35 U.S.C. § 103(c):

Subject matter developed by another person, which qualifies as prior art only under one or more subsections (e), (f) and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Since Forth is assigned to Power Measurement Ltd, the same assignee as the current Application, Forth shall not preclude patentability under 35 U.S.C. § 103. Applicants therefore request that the Examiner withdraw this rejection of Claims 2, 3, 5, 8, 23, 40, 59, 65 and 67.

Further, the Applicants submit that Butland in combination with Forth does not disclose all the elements of Claims 2, 3, 5, 8, 23, 40, 59, 65 and 67, as amended, as each of the cited references fails to disclose all of the elements of these claims alone or in

combination. Specifically, as disclosed in the previous section, Butland does not disclose: wherein the security module is operative to encrypt the presence as is claimed in claim 5, 40 and 59; wherein a second network and a firewall, the firewall operative to securely couple the network with a second network, as is claimed in claim 23; a firewall operative to securely
5 couple an external network with an internal network, as claimed in claim 65; wherein a security module is coupled with the first network interface and operative to prevent unauthorized access to the power management data with the power management data and power management commands being communicated as instant messages, as claimed in claim 67.

10 For at least these reasons, Claims 2, 3, 5, 8, 23, 40, 59, 65 and 67 are not unpatentable over Butland in view of Forth. Accordingly, Applicants request that the Examiner withdraw this rejection of Claims 2, 3, 5, 8, 23, 40, 59, 65 and 67.

IV. ALLOWED CLAIMS

15 Applicants appreciate the Examiner's indication that Claims 7, 13, 17, 37, 43 and 60-62 would be allowable if rewritten in independent form.


V. NEW CLAIMS

20 With this response, new dependent Claims 68-71 have been added. These claims add no new matter and are supported by the specification. Applicants submit that new claims 68-71 are not anticipated by Butland or Forth either independently or in combination for the same reasons as discussed above. Applicants therefore submit that new claims 68-71 are allowable over the cited art and request that the Examiner allow these new claims.

CONCLUSION

Each of the rejections in the Office Action dated January 31, 2003 has been addressed and no new matter has been added. Applicant submits that all of the pending claims are in
5 condition for allowance and notice to this effect is respectfully requested. The Examiner is invited to call the undersigned if it would expedite the prosecution of this application.

Respectfully submitted,

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